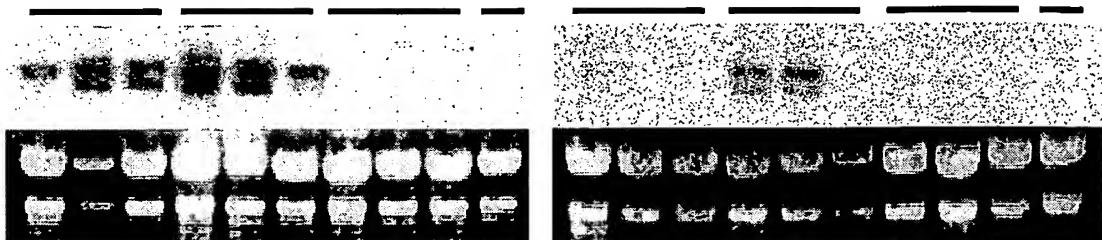


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## LjLegHb

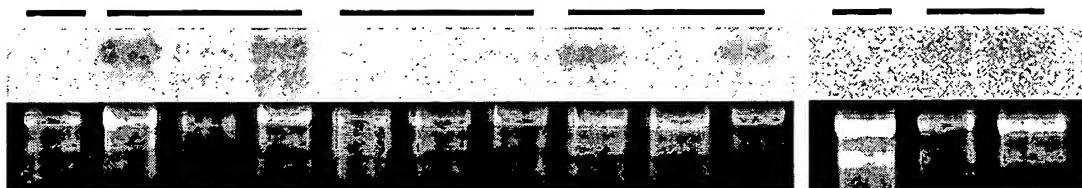
5      3      1.1.9      WT      1      4      17.2      WT



rRNA

## AtHb1

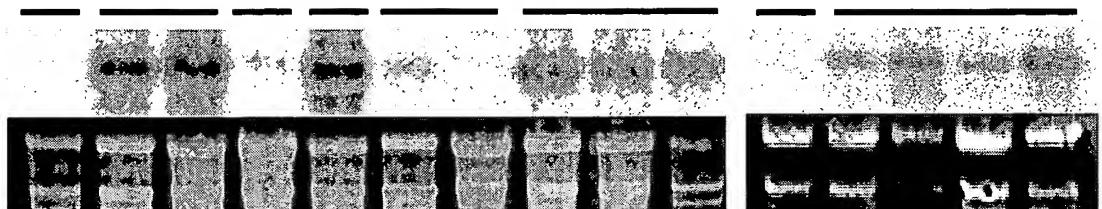
WT      35      39      17      WT      13



rRNA

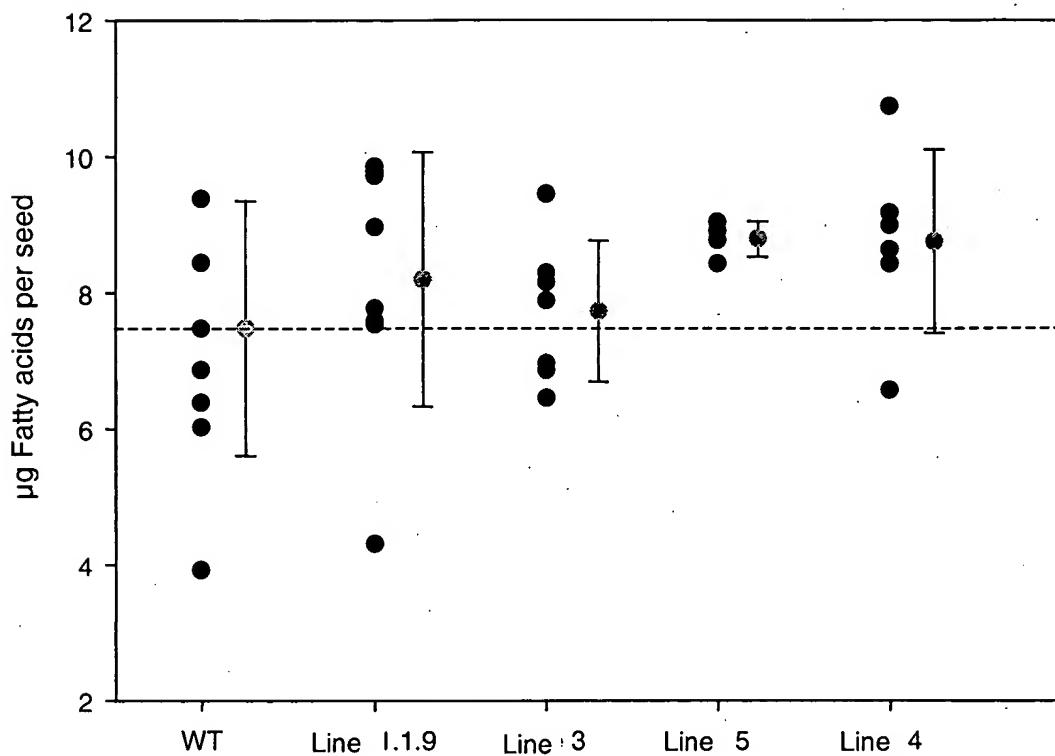
## AtHb2

WT      10      9      10      9      11      WT      2

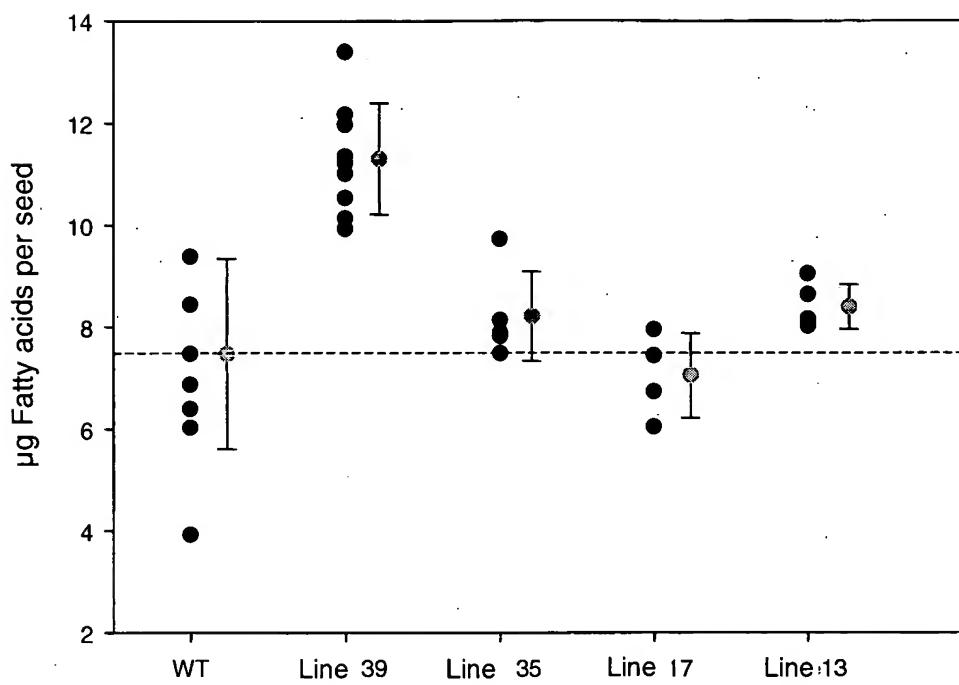


rRNA

**Figure 1.** Northern Blot analyses with maturing seeds of transgenic *Arabidopsis* plants which have been transformed with *Lotus* leghemoglobin (LjLegHb), *Arabidopsis* Hemoglobin 1 (AtHb1) or *Arabidopsis* Hemoglobin 2 (AtHb2). The amount of the total RNA employed was determined by comparing the amount of ribosomal RNA (rRNA).

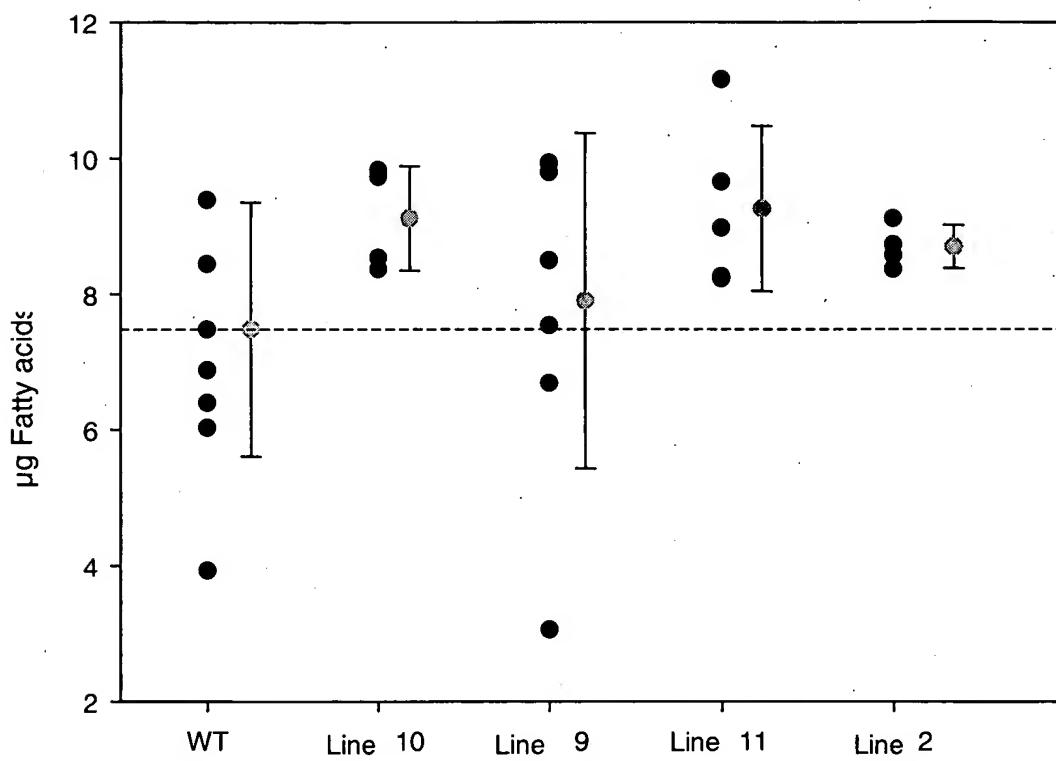


**Figure 2.** Graphic representation of the oil contents in T2 seeds of transgenic *Arabidopsis* lines which express LjLegHb in comparison with the control. The data from 4-9 individual measurements on in each case 5-10 seeds (●) and the resulting means with the corresponding standard deviations (○) are shown.



**Figure 3.** Graphic representation of the oil contents in T2 seeds of transgenic *Arabidopsis* lines which express AtHb1 in comparison with the control. The data from 4-9 individual measurements on in each case 5-10 seeds (●) and the resulting means with the corresponding standard deviations (◎) are shown.

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**Figure 4.** Graphic representation of the oil contents in T2 seeds of transgenic *Arabidopsis* lines which express AtHb2 in comparison with the control. The data from 4-9 individual measurements on in each case 5-10 seeds (●) and the resulting means with the corresponding standard deviations (○) are shown.

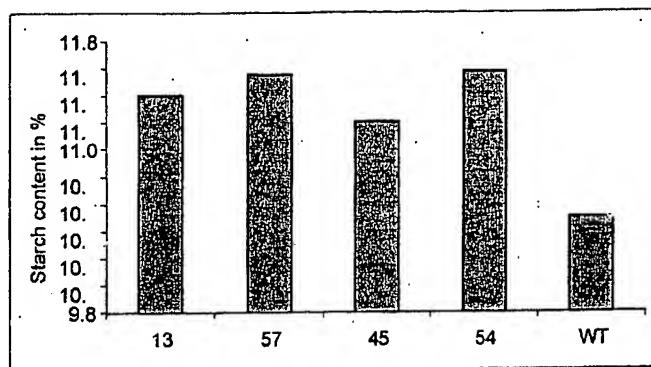
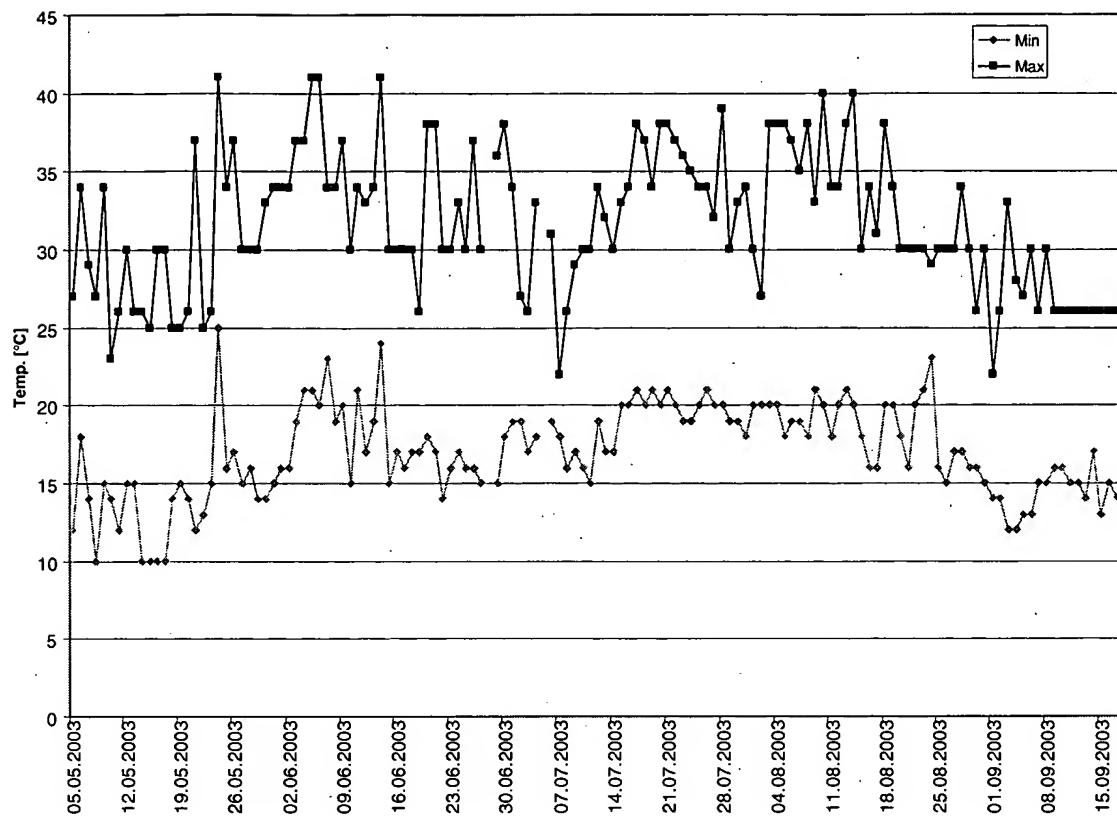


Figure 5. Starch content of leghemoglobin-expressing potato tubers in comparison with the wild type. Plants were grown in the polyhouse in Golm in summer 2003, and mature tubers were harvested. The starch content was measured by determining the specific gravity of the tubers. The data are based on in each case 334 tubers (line 13), 358 tubers (line 57), 380 tubers (line 45), 384 tubers (line 54) and 151 tubers (wild type).

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**Figure 6.** Temperature measurements in the polyhouse in which the transgenic potato plants which overexpressed the *Lotus japonicus* leghemoglobin were grown. The respective maximum and minimum temperatures are shown.